NONVISIBLE FEATURES REPOSITIONING ISSUES

February 28, 2001

The following pages are examples of repositioning issues concerning Nonvisible features in the Michigan Geographic Framework. They are presented here in draft form for consideration by Framework users and partners. Please review these examples and feel free to provide feedback to:

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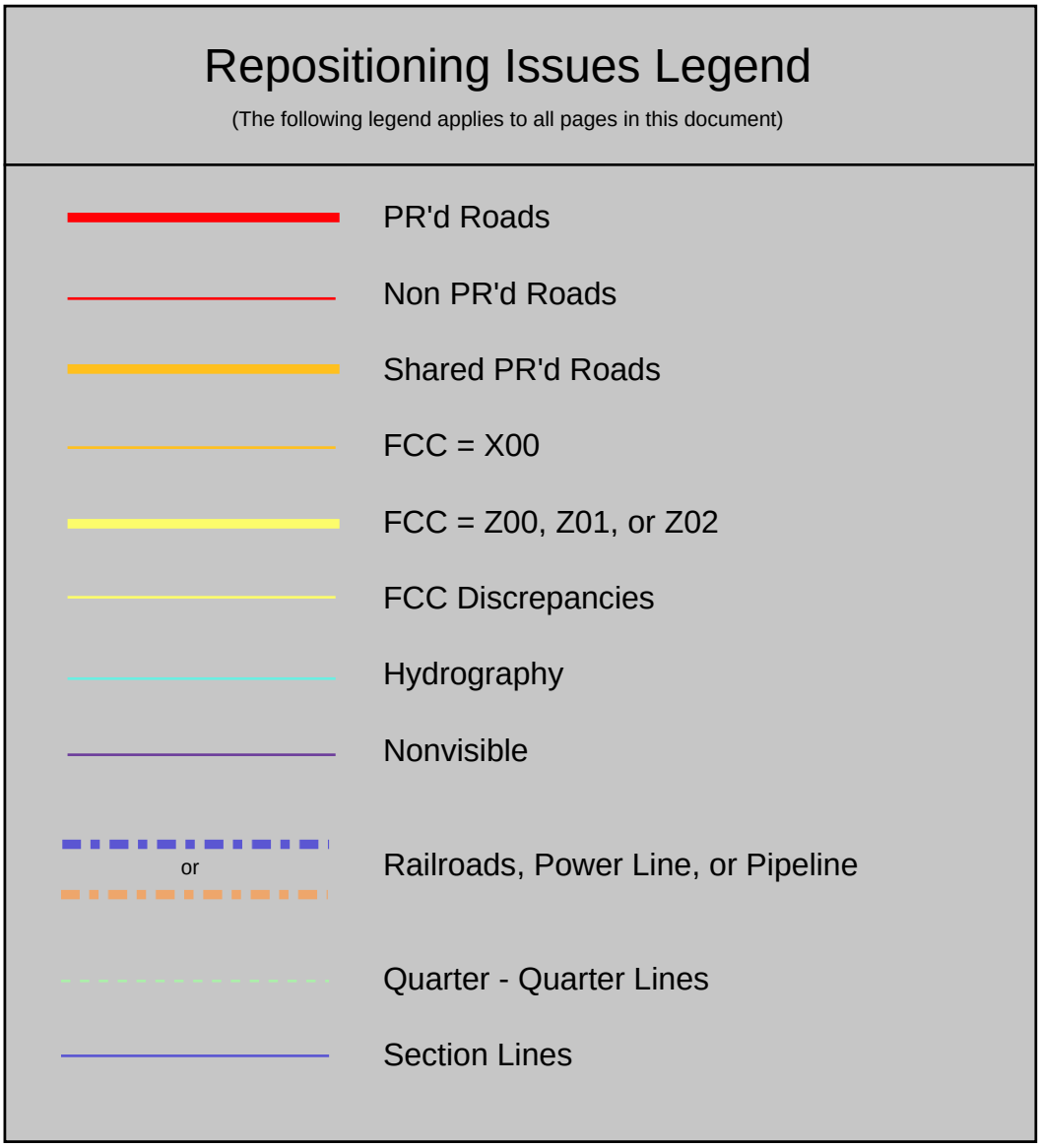
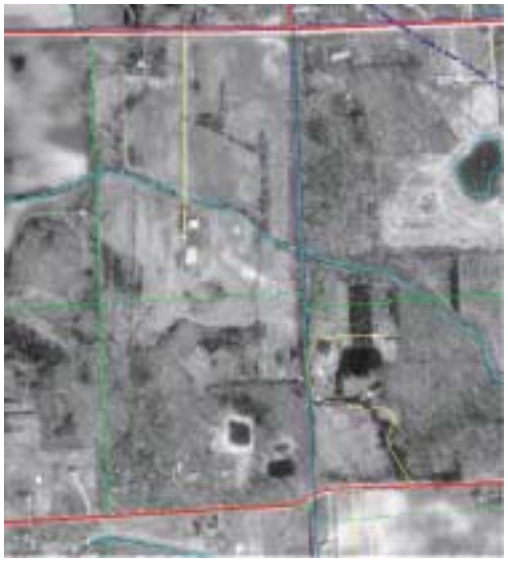
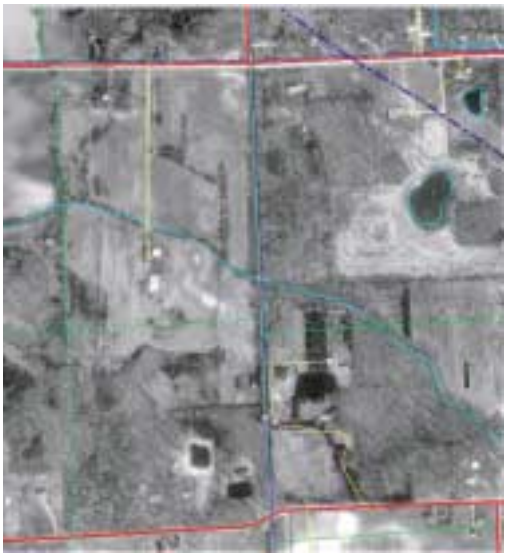


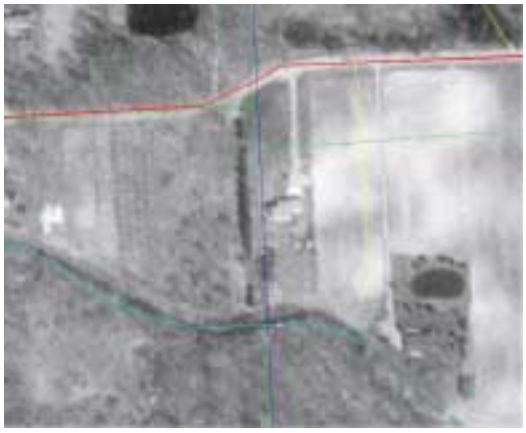
Nonvisible Example
Minor Civil Division (MCD) Boundary



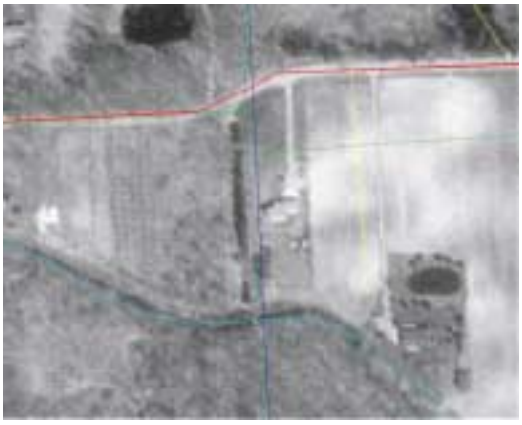
The above image is an example of a repositioning issue involving a township line road and a nonvisible MCD boundary. The vertical nonvisible boundary is extending straight off the township line road. When the township line road is moved, then the nonvisible must be repositioned to line up with the road.



This image shows the area after it has been repositioned. Notice that the entire MCD boundary is west of the quarter-quarter line. Also, the yellow feature was moved east so that the MCD line could be repositioned. By moving the yellow feature, this ensures that the polygon data remains accurate.

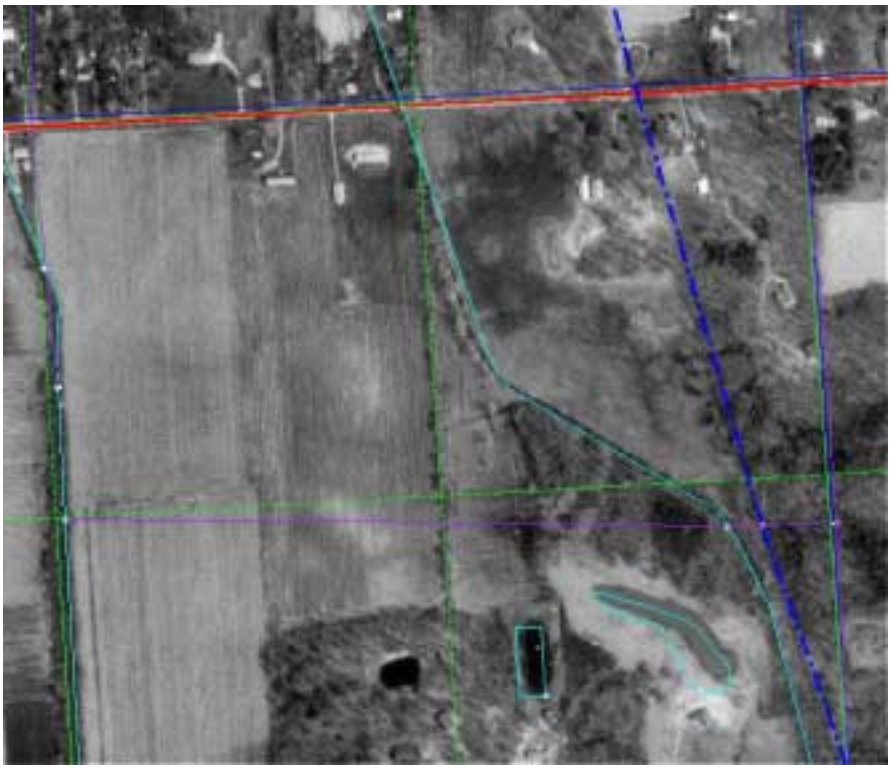


This view shows a closer look at part of the MCD boundary. Notice the jog in the MCD boundary and how the line crosses the quarter-quarter line. MCD boundaries are usually straight lines. Be consistent by keeping the boundary on the same side of the quarter-quarter line.



The above image shows the area after it has been repositioned. Notice that the jog in the MCD line was straightened. In addition, the MCD line was repositioned to the west of the quarter-quarter line. This is consistent with the rest of the MCD boundary.

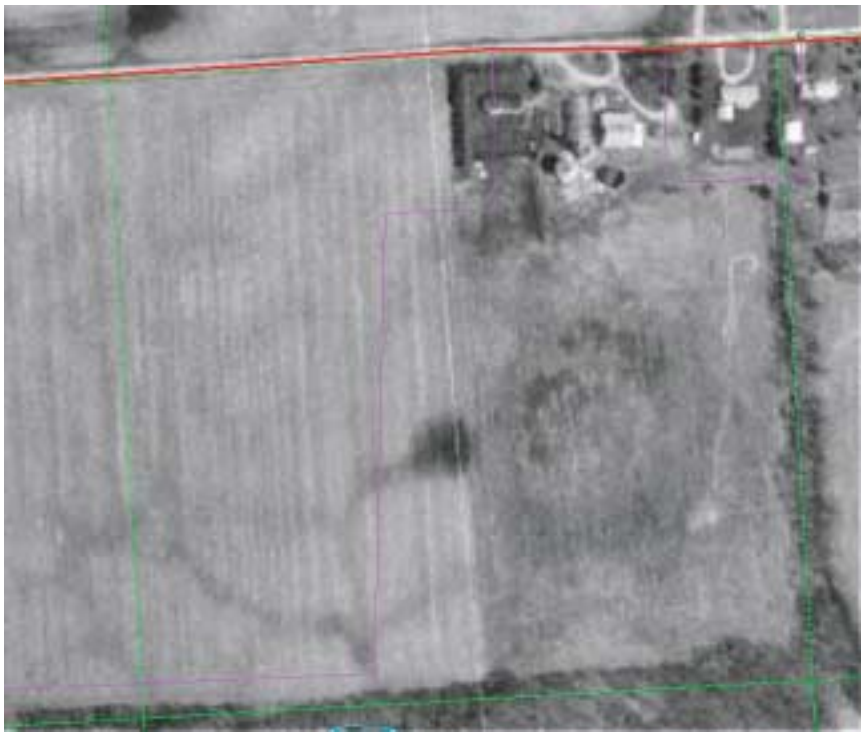
Nonvisible Example
School District Boundary



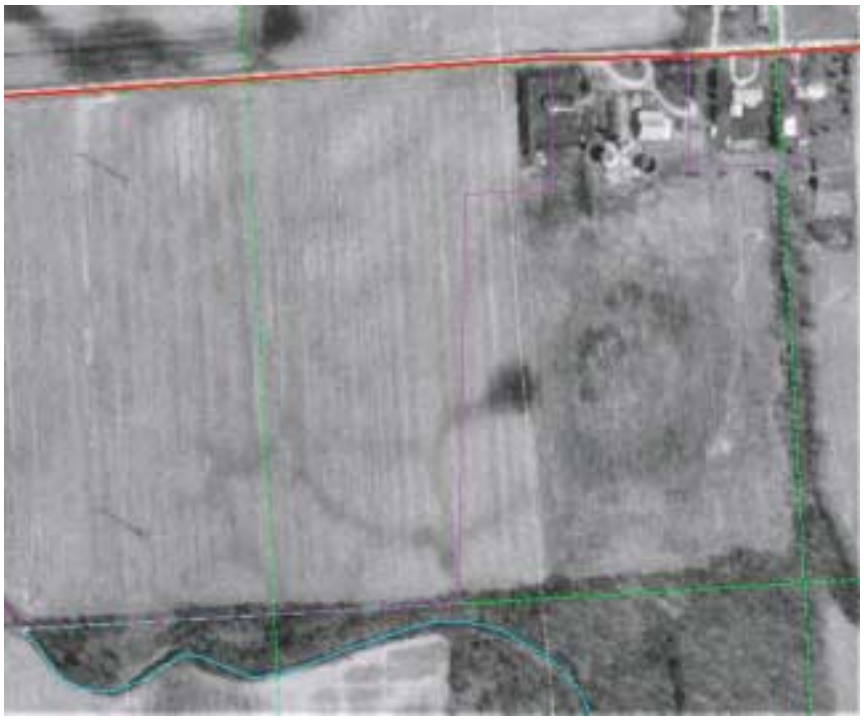
School district boundaries normally follow parcel boundaries. Therefore, a long school district boundary that is near a quarter-quarter line can be repositioned to follow the quarter-quarter line. Notice that the river feature is positioned correctly, but the nonvisible line needs to be moved north. The Repositioner must not split the river arc. This procedure would corrupt the polygon data on the river arc. The proper procedure to fix this situation would be to do a move node and then reshape the river feature.

This image shows the area after it has been repositioned. The school district boundary was repositioned to follow the quarter-quarter line. The polygon data was preserved by using the procedure described above, therefore no polygon attributes had to be changed.

Nonvisible Example
School District Boundary



Often, school district boundaries have an irregular pattern and appear to be randomly placed. However, school district boundaries normally follow parcel boundaries. If there is a long school district boundary near a quarter-quarter line, reposition the school district line to follow the quarter-quarter line.



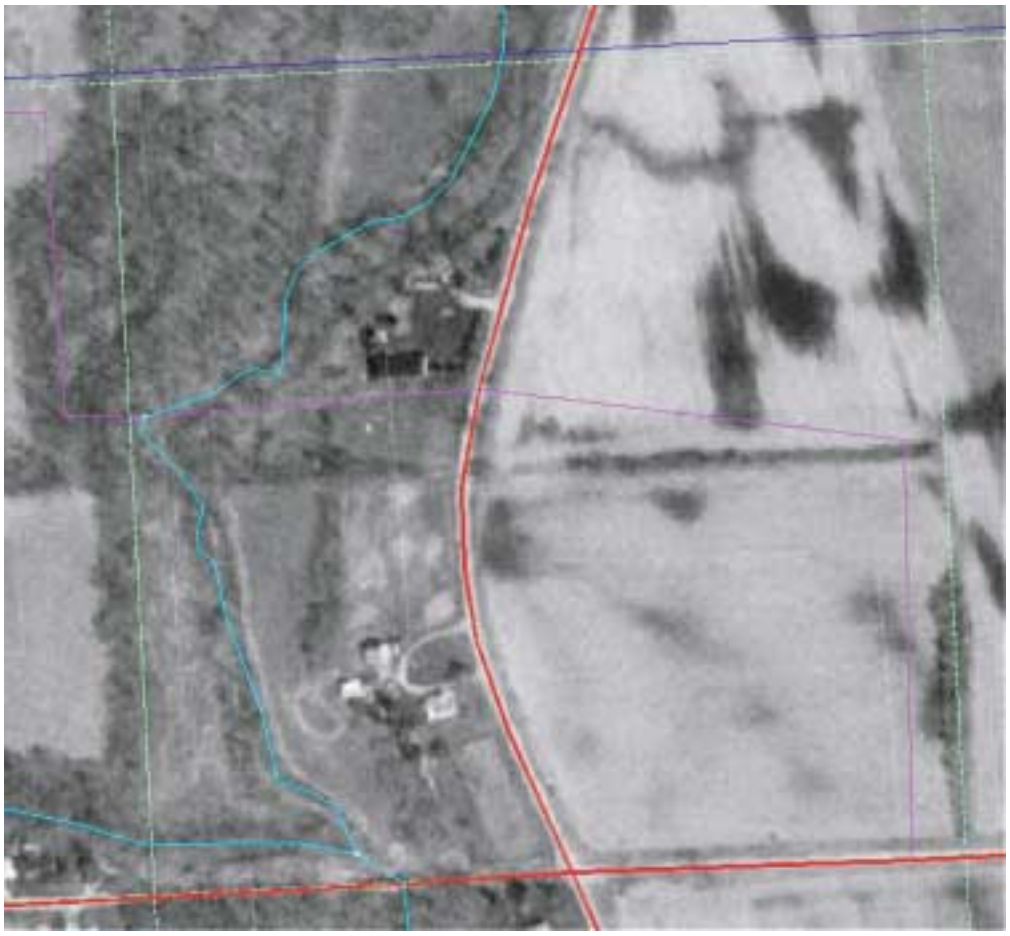
This image shows the area after it has been repositioned. The school district boundary in the southern part of the image was repositioned to follow the quarter-quarter line. Notice, the other two school district boundary arcs were not moved. The north-south boundary is not near a quarter-quarter line; thus, it was not moved. The smaller boundary in the northeast corner of the example was not moved because of the residence seen on the image. By moving this school district line to match the quarter-quarter line, the residence would be divided into two districts.

Nonvisible Example
School District Boundary

The image to the left shows a nonvisible feature that crosses a road feature. There is no visible feature on the imagery to use in repositioning the nonvisible feature. The road feature needs to be repositioned to the east. This moves the road features closer to the nonvisible. When moving the road feature, the Repositioner must preserve the general shape, location, and the topology of the nonvisible feature.

This image shows the area after it has been repositioned. Notice that the topology between the road and the nonvisible was not changed. This preserves the polygon data. In addition, the location of the nonvisible feature has not been moved and it's shape has not been changed. For an in depth explanation of the procedure used to reposition the road, see page R05.

Nonvisible Boundary Feature Example



This is an example of a nonvisible boundary that does not have a visible feature on the imagery that can be used to reposition. In this situation, do not reposition the nonvisible boundary.

Nonvisible Boundary Example
Census Block Boundary

The image at right is an example a nonvisible feature encompassing a residential area. Nonvisible features are difficult to reposition because there is no visible feature on the imagery to use. The roads in this area need to be repositioned. The Repositioner must preserve the shape of the nonvisible and topology between the road and the nonvisible.

This image shows a closer look at the area in question. Notice the nonvisible shares a node with a road intersection. When moving this node, the Repositioner must make sure that the arcs do not cross and the topology does not change.

The image at right shows the area after it has been repositioned. The entire residential area remains within the nonvisible boundary, keeping the census data accurate. Also, the general shape of the nonvisible was preserved. For an in depth explanation of the procedure used to reposition the road features refer to R23.